

WHAT IS CLAIMED IS

1. Recycling system of an aqueous paint comprising;

coating an aqueous paint having a paint color that is toned with two or
more original color aqueous paints in a water-curtain-type coating booth,

5 collecting an over-spray paint that does not adhere with an article to be
coated in a booth circulation water bath,

separating and concentrating the over-spray paint by ultrafiltration
equipment to store as a concentrated paint in a concentration bath, and
taking out said concentrated paint when it is used and toning color to reuse,
10 wherein, when two or more aqueous paints having different paint colors
are coated, in the recycling system said over-spray paints are collected
group by group according to a classification based on identity of
combinations of pigments contained in said aqueous paints, separated and
concentrated to store, so as to provide with smaller number of booth
circulation water baths, ultrafiltration equipments, concentration baths and
15 filtration baths than paint colors of aqueous paints.

2. The recycling system of an aqueous paint according to claim 1
wherein the concentrated paint is color-toned by a computer-color-matching
equipment to reuse.

20 3. Process for reusing an aqueous paint comprising;

coating an aqueous paint having a paint color that is toned with two or
more original color aqueous paints in a water-curtain-type coating booth,
collecting an over-spray paint that does not adhere with an article to be
coated in a booth circulation water bath,

25 separating and concentrating the over-spray paint by ultrafiltration

equipment to store as a concentrated paint in a concentration bath, and taking out said concentrated paint when it is used and toning color to reuse, wherein, when two or more aqueous paint having different paint colors are coated in the recycling system, said over-spray paints are collected group by group according to a classification based on identity of combinations of pigments contained in said aqueous paints, separated and concentrated to store.

4. The process for reusing an aqueous paint according to claim 3 wherein the concentrated paint is color-toned by a computer-color-matching equipment to reuse.

5. The process for reusing an aqueous paint according to claim 3 further comprising; when two or more aqueous paints which belong to different groups are changed from one color to another to coat, stopping coating an aqueous paint previously coated, washing a coating booth with a filtrate obtained from a group to which said aqueous paint belongs, and then changing to another aqueous paint which belongs to another group to start coating.

6. The process for reusing an aqueous paint according to claim 3 wherein the concentrated paint is temporarily stored in a concentrated paint bath until an aqueous paint which belongs to the same group is toned with the concentrated paint.

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